Saskatchewan Agriculture and Food

FARM *FACTS*

Dairy goat production in Saskatchewan

A guide for estimating investment and operating costs

This publication is intended to be used by producers who are:

1) interested in learning more about the economics and production aspects of a dairy goat enterprise; or

2) who are already in dairy production and would like to evaluate the economic potential of dairy goat production as an expansion or diversification opportunity.

This publication is intended to provide a format and a set of guidelines for determining costs of production for dairy goat operations. The production costs included in these enterprise budgets are based on information obtained from a variety of sources. While these figures were considered accurate at the time, they should only be used as a guideline when preparing your own budgets.

The benchmark figures used in the budgets are calculated for a stand alone enterprise rather than an enterprise that is part of a multi-enterprise farm unit. In a multi-enterprise farm operation building and equipment investment and operating costs could be shared between enterprises reducing costs from those shown in the example.

It is important to recognize that investment costs include a 4% return to the land, 6% return to buildings, equipment, and breeding stock. A charge for operator management and labour has also been included.

Given the economic environment in agriculture many types of farm operations are not able to cover all costs of production. As a result, producers need to use their own figures based on their own practices to evaluate various production alternatives to generate the greatest return from their available resources.

Market Overview

More people in the world drink goat milk than cow milk, however, the opposite is the case in North America. Goat milk is similar nutritionally to cow milk, but contains smaller fat globules and as a consequence is easier for some people to digest. As well, because of the smaller fat globules goat milk does not require homogenization.

Currently a large portion of goat milk sales take place through the farm gate with producers selling directly to consumers. Saskatchewan Health regulations require all farm gate operations to hold a valid Category II milk license. This license permits the sale of the pasteurized fluid milk and restricts the volume to 100 litres of goat milk per day.

Opportunities also exist for producers to sell directly to a dairy processing plant with no quantity restrictions. Producers should be aware that the dairy goat industry is not subject to the same milk quota restrictions as the dairy cow industry. This allows producers to start or expand a dairy goat enterprise without having to purchase quota.

Income and Expense Summary for a 100 Doe Dairy Enterprise

		$/unit	$/Year	$/Doe/Yr	Your Farm
Income					
1	Milk Sales	$ 0.55/L	$33,550	$ 335.50	
2	60 lbs Kid Sales (157)	$ 1.30/lbs	$12,246	$ 122.46	
3	Dairy Stock Sales (kids)	$ 250/hd	$ 0	$ 0.00	
4	Cull Sales (16)	$ 100/hd	$ 1,600	$ 16.00	
Total Income			**$47,630**	**$ 476.30**	
Operating Costs					
1.1	Doe/buck Feed Cost*		$ 7,480	$ 74.80	
1.2	Kid Feed Cost (birth-60 lbs)**		$ 3,970	$ 39.70	
Total Feed Cost			**$11,450**	**$ 114.50**	
2	Straw & Bedding		$ 300	$ 3.00	
3	Vet, Medicine and Supplies		$ 600	$ 6.00	
4	Maintenance and Repairs		$ 1,600	$ 16.00	
5	Utilities		$ 1,000	$ 10.00	
6	Manure Removal		$ 300	$ 3.00	
7	Insurance		$ 500	$ 5.00	
8	Annualized Buck Replacement Cost		$ 500	$ 5.00	
9	Office Supplies and Accounting		$ 350	$ 3.50	
10	Marketing Costs		$ 3,500	$ 35.00	
11	Dairy Supplies		$ 1,100	$ 11.00	
12	Buck Replacement		$ 500	$ 5.00	
Subtotal Operating Costs			**$21,700**	**$ 217.00**	
13	Operating Interest***		$ 644	$ 6.44	
Total Operating Costs			**$22,344**	**$223.44**	
Non -Cash Fixed Costs					
1	Depreciation		$ 5,961	$ 59.61	
2	Investment		$ 5,718	$ 57.18	
Total Fixed Costs			**$11,679**	**$116.79**	
Total Operating and Fixed Costs			**$34,023**	**$340.23**	
3	Labour		$ 8,000	$ 80.00	
Total Cost of Production			**$42,023**	**$420.23**	
Net Return			**$ 5,607**	**$ 56.07**	

Breakeven Milk Price required to cover:	$/L	
Operating Cost	$ 0.14	
Operating and Fixed Cost	$ 0.33	
Operating, Fixed Cost and Labour	$ 0.46	

*Doe/Buck feed costs are based on 5.5 lbs of hay/day, 1.5 lbs. of oats/day and .03 lbs of salt and minerals/day (ration is fed year round).

** Based on an average ration of 3.0 lbs of hay/day and 1 lbs. of oats/day for 210 days.

***Operating interest is based on 1/3 of operating costs at a 9% interest rate.

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Assumptions

1. Buildings and equipment are valued at market value.
2. All feed is valued at market value.
3. Manure removal is contracted out.
4. 15 doelings are retained for replacements
5. Average productive life of a doe is 10 yrs.
6. Average productive life of a buck is 4 yrs.
7. On average 1 buck is required per 25 does.
8. Kids are removed from does at birth and fed to a sale weight of 60 lbs.

Herd Profile

	Total		Your Farm
Number of Does	100		_____
Number of Bucks	4		_____
Doe Mortality Rate (%)	2	%	_____
Doe Cull Rate (%)	13	%	_____
Kid Birth Rate (%)	175	%	_____
Kid post-birth Mortality Rate (%)	2	%	_____
Kids Marketed*	157		_____
Average Milking days/goat	305		_____
Average Milk Production/goat/day	2	Litres	_____

- *Kids marketed is equal to the number of kids weaned less post-weaning mortality and doelings retained for replacements.
- For this scenario all kids are marketed at an average weight of 60 lbs.

Capital Investment

		Your Farm
Buildings:		
Loose Housing Barn	$20,000	_____
Dairy Parlour	$25,000	_____
Handling Facilities	$ 1,000	_____
Well and Watering Bowls	5,000	_____
Total Building Cost	**$51,000**	
Machinery & Equipment:		
Dairy Equipment	$30,000	_____
Tractor & Loader	$10,000	_____
Truck (enterprise share)	$ 5,000	_____
Miscellaneous Equipment & Tools	$ 10,000	_____
Total Machinery Investment	**$55,000**	

		Your Farm
Dairy Stock⁺:		
Does (100 x $350)	$35,000	_____
Bucks (4 x $500)	$ 2,000	_____
Total Dairy Stock Investment	**$37,000**	

⁺ Value of dairy stock can vary from $100/hd to over $1000/hd depending on breed and quality.

Total Capital Investment	**$145,000**	_____

Non Cash Fixed Cost Calculations

Depreciation

$$Depreciation = \frac{\text{Purchase Price - Salvage Value}}{\text{Years of useful life}}$$

		Your Farm
Buildings ($51,000 - 5,100)/25	$ 1,836	_____
Equipment ($55,000 - 3500)/12	$ 4,125	_____
Total Depreciation	**$ 5,961**	

Investment Cost

Depreciable Assets:

$$\frac{Original\ Value + Salvage\ Value}{2} \times Interest\ Rate$$

Buildings ($51,000 + 5,100)/2 x 6%	$ 1,683	_____
Equipment ($55,000 + $ 5,500)/2 x 6%	$ 1,815	_____

Non-Depreciable Assets:

Investment cost = market value x interest rate

Breeding Stock ($37,000 x 6%)	$ 2,220	_____
Total Investment Cost	**$ 5,718**	

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